

Appl. No. 10/627,786
Amtd. Dated July 9, 2004
Reply to Office Action of April 9, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An electrical connector assembly, comprising:
an insulative housing defining at least two cavities;
a first and second array of conductive contacts received in the housing, each of the first and the second ~~contact~~ contacts partially extending into a corresponding cavity;
a ground plate disposed between the first and the second contacts;
~~an internal PCB a printed circuit board~~ arranged in a rear portion of the housing, the ~~internal PCB~~ printed circuit board having a plurality of signal traces and a ground trace, at least one array of contacts electrically connecting with the signal traces, the ground plate coupling to the ground trace; and
an outer shell substantially surrounding the insulative housing, the outer shell having a plurality of first tabs on opposite sides thereof mechanically and electrically engaging with the ground plate.

Claim 2 (original): The electrical connector assembly according to Claim 1, wherein the housing defines a plurality of holes on opposite sides, and the first tabs extend through respective one of the holes and electrically contact with the ground plate.

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Claim 3 (original): The electrical connector assembly according to Claim 1, wherein the housing defines a slot between the two cavities for receiving the ground plate therein.

Claim 4 (original): The electrical connector assembly according to Claim 3, wherein the ground plate has a grounding claw extending upwardly from one end thereof, the grounding claw extending beyond the housing for electrically connecting with the outer shell.

Claim 5 (original): The electrical connector assembly according to Claim 1, wherein the outer shell includes a front shell and a rear shell, the front shell including an upper plate defining a plurality of locking slots therein and two side plates each having a plurality of embossments, the rear shell including a plurality of locking holes locking over embossments of side plates and a plurality of barbs engaging with locking slots of the upper plate.

Claim 6 (currently amended): The electrical connector assembly according to Claim 5, wherein the front shell defines a depression therein, and wherein the grounding plate has a the grounding claw of the ground plate bears bearing against the depression.

Claim 7 (original): The electrical connector assembly according to Claim 1, wherein the ground plate has a grounding leg extending downwardly from other

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end thereof, the grounding leg electrically connecting with the grounding trace.

Claim 8 (currently amended): The electrical connector assembly according to Claim 1, wherein the outer shell has a plurality of second tabs for connecting with the grounding traces of the internal PCB printed circuit board.

Claim 9 (original): The electrical connector assembly according to Claim 8, wherein the second tabs are arranged in a vertical row and the first tabs are arranged in a horizontal row.

Claim 10 (currently amended): The electrical connector assembly according to Claim 1, further including a pair of LEDs Light Emitting Diodes (LEDs) attached to the internal PCB printed circuit board for visual indication and signal conditioning components arranged on the internal PCB printed circuit board for reducing or eliminating noise.

Claim 11 (original): An electrical connector comprising:
an insulative housing defining divided first and second cavities;
a plurality of first contacts and a plurality of second contacts respectively located in said two cavities, respectively;
a ground plate located between and separating said first and second cavities;
a front shield covering at least a front face of the housing and defining two opening to expose said first and second cavities to an exterior in a front-to-back direction;
and

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a printed circuit board disposed behind and perpendicular to the grounding plate; wherein said grounding plate includes a front section mechanically and electrically engaging a middle portion of the front shield which is located between the two openings, and a rear section mechanically and electrically engaging the printed circuit board.

Claim 12 (original): The connector according to claim 11, further including two side shells with inwardly extending tabs engaged with either the ground plate or the printed circuit board.

Claim 13 (currently amended): The connector according to claim 12, wherein said ~~two~~ two sides shells are integrally formed with the front shield.

Claim 14 (original): The connector according to claim 11, wherein said housing includes a plurality of through holes to allow said tabs to extend therethrough.

Claim 15 (currently amended): An electrical connector comprising:
an insulative housing defining divided first and second cavities;
a plurality of first contacts and a plurality of second contacts respectively located in said two cavities, respectively;
a ground plate located between and separating said first and second cavities;
an outer shield shell at least partially covering the housing; and
a printed circuit board disposed behind and perpendicular to the grounding plate;

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wherein

said grounding plate includes legs mechanically and electrically engaging the printed circuit board, and said outer shell includes tabs mechanically and electrically engaging the printed circuit board.

Claim 16 (original): The connector according to Claim 15, wherein said outer shell further includes other tabs engaging the ground plate.